AMENDMENTS TO THE CLAIMS:

Please AMEND the claims as indicated in the following listing of the claims:

1. (Currently amended) A vacuum interrupter comprising:

dielectric encapsulation having a one-piece molded material and configured to substantially encapsulate the vacuum interrupter;

a vacuum chamber molded into the dielectric encapsulation, the vacuum chamber comprising:

a ceramic housing;

a first end cap sealing the housing;

a second end cap sealing the housing;

a floating shield within the housing; and

an exposed ring integral with the housing and coupled with the floating shield;

a semi-conductive material in contact with the exposed ring and disposed on a central exterior portion of the vacuum chamber ceramic housing such that bands at end portions of the vacuum chamber ceramic housing are substantially free of the semi-conductive material;

a first voltage screen connected to the first end cap and disposed outside the housing; and

a second voltage screen connected to the second end cap and disposed outside the housing,

said first voltage screen overlapping a first portion of the semi-conductive material, and forming a capacitive path with the semi-conductive material, and

said second voltage screen overlapping a second portion of the semi-conductive material, and forming a second capacitive path with the semi-conductive material.

2. (Canceled).

3. (Previously presented) The vacuum interrupter of Claim 1 wherein the dielectric encapsulation is epoxy.

4. (Previously presented) The vacuum interrupter of Claim 1 wherein at least one of the voltage screens comprises a perforated metal sheet.

5. (Previously presented) The vacuum interrupter of Claim 1 wherein at least one of the voltage screens comprises a metallic mesh material.

6. (Previously presented) The vacuum interrupter of Claim 1 wherein at least one of the voltage screens is generally bowl-shaped.

7. (Canceled)

8. (Currently amended) The vacuum interrupter of Claim 1 [[7]] wherein the voltage screens substantially enclose the vacuum chamber.

9. (Currently amended) The vacuum interrupter of Claim 1 [[7]] wherein the voltage screens are mirror images of each other.

10. (Currently amended) A system for mitigating electric field distortion inside a shielded encapsulated vacuum interrupter comprising:

a vacuum chamber;

a floating shield within the vacuum chamber;

a semi-conductive material applied to an exterior central portion of the vacuum chamber, coupled with the floating shield, and disposed within the shielded encapsulation such that bands at exterior end portions of the vacuum chamber are substantially free of the semi-conductive material;

a first voltage screen electrically connected to a first end of the vacuum chamber, ~~and~~ disposed within the shielded encapsulation, ~~for~~ enclosing a first portion of the semi-conductive material, and forming a capacitive path with the semi-conductive material; and

a second voltage screen electrically connected to a second end of the vacuum chamber, ~~and~~ disposed within the shielded encapsulation, ~~for~~ enclosing a second portion of the semi-conductive material, and forming a capacitive path with the semi-conductive material.

11. (Previously presented) The system of Claim 10 wherein the first and second voltage screens comprise a perforated metal sheet.

12. (Previously presented) The system of Claim 10 wherein the first and second voltage screens comprise a metallic mesh material.

13. (Original) The system of Claim 10 wherein the first and second voltage screens are generally bowl-shaped.

14. (Original) The system of Claim 10 wherein the first and second voltage screens are mirror images of each other.

15. (Original) The system of Claim 10 wherein the first and second voltage screens substantially enclose the vacuum chamber exterior.

16. (Currently amended) A method for mitigating electric field distortion inside a shielded encapsulated vacuum interrupter comprising:

providing a vacuum chamber comprising:

a first conductive endcap;

a second conductive endcap;

a floating shield within the chamber; and

an exposed ring coupled with the floating shield and disposed on~~in~~ the exterior of the vacuum chamber;

disposing a first semi-conductive material on an exterior central portion of the vacuum chamber and contacting the exposed ring such that bands at exterior end portions of the vacuum chamber are substantially free of the semi-conductive material;

connecting a first voltage screen to the first conductive endcap;

disposing the first voltage screen exterior to the chamber so as to form a capacitive path with the semi-conductive material;

connecting a second voltage screen to the second conductive endcap;

disposing the second voltage screen exterior to the chamber so as to form a capacitive path with the semi-conductive material;

encapsulating the vacuum chamber and voltage screens in molded dielectric material; and

disposing a second semi-conductive material on the exterior of the molded dielectric material.

17. (Currently amended) The method of claim 16 wherein the first and second voltage screens ~~are comprised of~~include a perforated metal sheet or a metallic mesh material.

18. (Original) The method of claim 16 wherein the first and second voltage screens are generally bowl-shaped.

19. (Original) The method of claim 16 wherein the first and second voltage screens substantially enclose the vacuum chamber and first semi-conductive material.

20. (Original) The method of claim 16 wherein the first and second voltage screens are mirror images of each other.

21. (Original) The method of claim 16 wherein the first semi-conductive material and the second semi-conductive material are the same.

22. (Previously presented) The method of claim 16 wherein the molded dielectric material is epoxy.

23. (New) A vacuum interrupter, comprising:

a dielectric encapsulation;

a vacuum chamber disposed within the dielectric encapsulation, including:

a floating shield disposed within the vacuum chamber; and

an exposed ring electrically coupled with the floating shield and integral with the vacuum chamber;

a semi-conductive material disposed on an exterior of the vacuum chamber and coupled with the exposed ring; and

a voltage screen coupled to and disposed outside the vacuum chamber, and forming a capacitive path with the semi-conductive material.

24. (New) The vacuum interrupter of claim 23, wherein the voltage screen is embedded in the dielectric encapsulation.

25. (New) The vacuum interrupter of claim 23, wherein the vacuum chamber includes an end cap, and the voltage screen is coupled to the end cap.

26. (New) The vacuum interrupter of claim 25, wherein the capacitive path is between the floating shield and the end cap.

27. (New) The vacuum interrupter of claim 23, further comprising a second voltage screen coupled to and disposed outside the vacuum chamber so as to form a second capacitive path with the semi-conductive material.

28. (New) The vacuum interrupter of claim 27, wherein the vacuum chamber includes a second end cap, and the second voltage screen is coupled to the second end cap.

29. (New) The vacuum interrupter of claim 28, wherein the second capacitive path is between the floating shield and the second end cap.

30. (New) A method for mitigating electric field distortion inside a vacuum interrupter, which includes a dielectric encapsulation, a vacuum chamber that includes a floating shield, and an exposed ring coupled with the floating shield and integral with the vacuum chamber, the method comprising:

disposing a semi-conductive material on an exterior of the vacuum chamber and in contact with the exposed ring;

coupling the voltage screen to the vacuum chamber; and

disposing the voltage screen outside the vacuum chamber so as to form a capacitive path with the semi-conductive material.

31. (New) The method of claim 30, wherein disposing the voltage screen around the vacuum chamber includes embedding the vacuum chamber in the dielectric encapsulation.

32. (New) The method of claim 30, wherein the vacuum chamber includes an end cap, and coupling the voltage screen to the vacuum chamber includes coupling the voltage screen to the end cap.

33. (New) The method of claim 32, wherein the capacitive path is formed between the floating shield and the end cap.

34. (New) The method of claim 30, further comprising coupling a second voltage screen to the vacuum chamber and disposing the second voltage screen outside the vacuum chamber so as to form a capacitive path with the semi-conductive material.

35. (New) The method of claim 34, wherein the vacuum chamber includes a second end cap, and coupling the second voltage screen to the vacuum chamber includes coupling the second voltage screen to the second end cap.

36. (New) The method of claim 35, wherein the second capacitive path is formed between the floating shield and the second end cap.